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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,759	04/14/2004	Stephen G. Holmes	NVID-P000905	7064
45594 7590 01/28/2008 NVIDIA C/O MURABITO, HAO & BARNES LLP TWO NORTH MARKET STREET THIRD FLOOR SAN JOSE, CA 95113			EXAMINER BRINEY III, WALTER F	
			ART UNIT 2615	PAPER NUMBER
			MAIL DATE 01/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/824,759	Applicant(s) HOLMES, STEPHEN G.	
	Examiner Walter F. Briney III	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-17 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/18/07; 10/23/07</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claim 8 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Non-Final Rejection at 2 (25 July 2007)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaalaas et al. (US Patent 6,226,758 B1) in view of Sundqvist et al. (US Patent Application Publication 2004/0071132 A1).**

Claim 10 is limited to a method for synchronizing audio processing modules.

Applicant's instant amendment modifies the determining step to require determining if an associated set of audio processing modules utilize a common clock source from a global unique identifier received from each of said plurality of audio processing modules. The preposition "from a global..." is a misplaced modifier but appears semantically linked to the verb "determining" and neither the verb "utilize" nor the noun "source." Restated, the new limitation recites: (1) receive from the first audio processing module a global unique identifier; (2) receive from the second audio processing module a global unique identifier; (3) based on the identifier from the first processor, determine a first clock source; (4) based on the identifier from the

second processor, determine a second clock source. Inspecting the rejection of claim 1 *infra* shows that the only difference between the instantly amended claim 10 determining step and the instantly amended function of the claim 1 clock manager is that this claim uses global unique identifiers in place of identifiers. The phrase global unique identifiers is a term of art, sometimes abbreviated as GUID, which refers to a collection of bytes forming a reference point that is unique across software contexts. To achieve this uniqueness, widespread collusion among developers is necessary in developing their products to conform to one of the many available standards. In view of these considerations, a true GUID is illusory since such widespread collusion is non-existent as evidenced by the many standards. A GUID is then simply the same as the claim 1 identifier since *Sundqvist* essentially teaches just another GUID standard. Since the GUID is the same as the claim 1 identifier, *Sundqvist* teaches the GUID.

2. **Claims 1-7, 9 and 11-17 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaalaas in view of Sundqvist and further in view of Linz (US Patent 6,005,901).**

Claim 1 is limited to an electronic audio system. Applicant's instant amendment to this claim requires that the clock manager's determining function determines if an associated set of audio processing modules utilize a common clock source from a global unique identifier received from each of said plurality of audio processing modules. The new limitation, restated, recites: (1) the clock manager receives from the first audio processing module an identifier and (2) receives from the second audio processing module an identifier; (3) based on the identifier from the first processor, the clock manager determines a first clock source; (4) based on the identifier from the second processor, the clock manager determines a second clock source. The

clock manager of this claim appeared rejected in view of *Sundqvist*, accordingly this rejection will refer to *Sundqvist* when discussing the new limitations. Non-Final Rejection at 4 (25 July 2007). *Sundqvist* teaches determining the sample rate/clock rate of the sample stream S32 entering sample rate converter 303 from the A/D converter 302. *Sundqvist* at ¶¶ 36, 41 (determining whether the sample rate of stream S32 matches a required sample rate requires determining the sample rate of stream S32). Receiving the stream S32 naturally includes receiving a stream of data from a first processor 302 at a particular sample rate, which sample rate encodes the identity of the clock source used in generating the stream S32; so receiving stream S32 corresponds to (1) *supra*. The sample rate encodes the identity of the clock source since the sample rate is a reflection of how fast the clock is oscillating and oscillation rates are direct properties describing a clock. Accordingly, determining the sample rate encoded in the rate at which samples are received determines the clock source, so determining the sample rate of S32 corresponds to (3) *supra*. *Sundqvist* teaches retrieving from memory the sample rate/clock rate required by a second audio processing module 304. *Id* at ¶ 42. Retrieving from memory clearly corresponds to (2) *supra* since the required rate is a sample rate, sample rates identify the rate a clock is oscillating and oscillation rates describe clocks. Note that the memory is arbitrarily taken as a portion of the claimed second audio processor. Reading the data retrieved from memory, thus, results in reading an oscillation rate, which reading corresponds to (4) *supra*. The remaining limitations not discussed *supra* are not affected by applicant's instant amendments, thus, the remaining limitations are rejected for the same reasons set forth in the Non-Final Rejection at 3-5 (25 July 2007).

Claim 17 is limited to a method for synchronizing audio processing modules.

Applicant's instant amendment adds a determining step to this claim that performs the same functions as the instantly amended clock manager of claim 1. Accordingly, those features of *Sundqvist* relied upon to teach the functions of the claim 1 clock manager are likewise relied upon to teach the functions of this claim's determining step. The remaining limitations not discussed *supra* are not affected by applicant's instant amendments, thus, the remaining limitations are rejected for the same reasons set forth in the Non-Final Rejection at 10, claim 17 (25 July 2007).

Claim 21 is limited to a computing device. Applicant's instant amendment requires connections between the clock manager and the audio processing modules, sample rate converter and buffer, and the amendment requires clock manager functionality analogous to the clock manager functionality recited in claim 1. Accordingly, those features of *Sundqvist* relied upon to teach the clock manager functions of claim 1 are likewise relied upon to teach the functions of this claim's clock manager. The rejection of claim 1 *supra* establishes that the clock manager 401 of *Sundqvist* is connected with both the first and second audio processors since it receives samples from a first processor and a clock rate from a memory arbitrarily taken as part of the second processor. Based on the rejections imported from the Non-Final Rejection at 4-5 (25 July 2007), the rejection of claim 1 *supra* combines the *Linz* sample rate converter into *Gaalaas*; the *Linz* sample rate converter includes a convolver 32 that is controlled by a clock manager 22, so the sample rate converter at 32 is connected to the clock manager 22. Based on the rejections imported from the Non-Final Rejection at 4 (25 July 2007), the clock manager 401 of *Sundqvist* controls switches to enable/disable sample rate conversion so the clock manager 401 is

connected to the *Linz* buffers inside the *Gaalaas* sample rate converter 202. The remaining limitations not discussed *supra* are not affected by applicant's instant amendments, thus, the remaining limitations are rejected for the same reasons set forth in the Non-Final Rejection at 11-12, claim 21 (25 July 2007).

Claims 2-7, 9, 11-16, 20 and 22-25 are rejected for the same reasons set forth *supra* apropos claims 1, 10, 17 and 21 and for the reasons set forth in the Non-Final Rejection at 3-12 (25 July 2007).

Response to Arguments

Applicant's arguments with respect to claims 1-7, 9-17 and 20-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SUPERVISORY PATENT EXAMINER

/wfb/
1/22/08